

#12.

Hawaiian Explorations.

Dr 3977 - 3987.

Hy. 4393 - 4430.

June 2^d - 11th, 1902.

$$\begin{array}{r} 27.9 \\ 25 \overline{) 27.9} \\ \hline 52.9 \end{array}$$

		2500	
		2600	
		2700	
Wave	12-16	2800	3977
U	Hy.	2900	43193
		3000	
		3100	
		3200	
		3300	
		3400	
		3500	
		3600	
		3700	
		3800	
		3900	
		4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Stilly
 No. 4393 *Hy.* Date *2 June 02*
Sigsbee Machine. 1 Reel. *1000*
 Turns *263* Cor. + *26* Depth *289 fms*
 Shot or lead *69 #*
 Bottom *co. co. S. Sk.*
 Bottom temperature *45.5*
 No. of thermometer *80460* Cor.
 Corrected temperature
 Air *80* Surface *75* Drift
 Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>11.11.50</i>	<i>11.18.20</i>	0		
<i>12.40</i>	<i>17.10</i>	100		
<i>13.50</i>	<i>16.00</i>	200		
<i>14.30</i>	<i>15.30</i>	<i>263</i>		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Modern Name of Bird Island - Vicinity of
 Center of Bird I^d - N 73° E, 5 ¹/₁₀'

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

4830 257

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	26.3 26 28			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No.

1394

Hy.

Date

June 07

Machine.

Reel.

Turns

23

Cor. +

2

Depth

25 fms

Shot or lead

35 lb

Bottom

Co. S.

Bottom temperature

No. of thermometer

75°
80460

Cor.

Corrected temperature

Air

80

Surface

75

Drift

Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

11.37.40

11.38.50

23
-100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Center of Bore - N 71° E., 7 ⁴/₁₀'

OK
HCB.
✓

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

4830

23

257

4807

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

507. *Stacy*
P. 2 38.4 1/2
 No. *4395* Date *June 7-02*
Sigsbee Machine. — Reel.
 Turns *21* Cor. + *1* Depth *22 fms*
 Shot or lead *26 lb*
 Bottom *Co S. sm sh. Co.*
 Bottom temperature
 No. of thermometer *11-11-11* Cor.
 Corrected temperature
 Air *80* Surface *75* Drift
 Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>11.47.00</i>	<i>11.47.50</i>	0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Center of Bird Id. - N 71° E., 7 ⁶/₁₀'

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

496
21
475

12
11

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Stacy
 No. *14396* Date *7 June 07*
Wagner Machine. Reel.
 Turns *22* Cor. + *1* Depth *23 fms*
 Shot or lead *26#*
 Bottom *Co. S.*
 Bottom temperature
 No. of thermometer *Time* Cor.
 Corrected temperature
 Air *80* Surface *75* Drift
 Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>11:51.10</i>	<i>11.57.10</i>	0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Station of 1912-1913 2471° E. 7 1/10

495

12

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No.

Date

Machine.

Reel.

Turns 22 Cor. +

Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air

Surface

Drift

Trawl or dredge

SOUNDING WIRE.

DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Center of Buoy - N 70° 45' E, 8 ²/₁₀

0

OK
3/10/10

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *1157* Date *2 Aug 02**Tanner* Machine. — Reel. —Turns *21* Cor. + *1*Depth *22 f*~~Shot or lead~~ *26 Lbs.*Bottom *Co. co s.*

Bottom temperature

No. of thermometer *4* *None* Cor.

Corrected temperature

Air *80* Surface *75* Drift

Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

0

21

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Center of Buoy Id - N 70° 45' E, 8 1/2'

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

P.L. 40.0

507.

No.

Date

Machine. - Reel.

Turns 21 Cor. + 1 Depth 22 fms

~~Shot or lead~~ 26 lbs.

Bottom S. Co.

Bottom temperature

No. of thermometer } None. Cor.

Corrected temperature

Air 80 Surface 75 Drift

Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Center of Buoy Id. N 70° 30' E, 9 1/2

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

31 496

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *Hy. 4400*. Date *2 June '02*
Tanner Machine. - Reel. -
 Turns *21* Cor. + *1* Depth *22 fms.*
 Shot or lead *26 Lbs*
 Bottom *Co S.*
 Bottom temperature
 No. of thermometer *7* None Cor.
 Corrected temperature
 Air *80* Surface *75* Drift
 Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>15.22.00</i>		0		
		<i>21</i>		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Center of Buoy 30 N 70° 15' E., 10 ²/₁₀'

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *11* Date *Jan 11**Tanner* Machine. — Reel. *11* —Turns *11* Cor. + *1* Depth *12*Shot or lead *26* Lbs.Bottom *Co. S.*

Bottom temperature

No. of thermometer *None* Cor.

Corrected temperature

Air *80* Surface *75* Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Center of Buoy - N 70° E. 11 1/2'

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

496

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *51* *4402* Date *2**Tanner* Machine. Reel.Turns *1* Cor. + *1* Depth~~Shot or lead~~ *26* Lbs.Bottom *CR.*

Bottom temperature

No. of thermometer *None* Cor.

Corrected temperature

Air *80* Surface *75* Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		10		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Center of Buoy - N 69° 45' E., 12 3/10

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No.

Date

Machine. / Reel.

Turns 18 Cor. +

Depth

Shot or lead

36 Lbs.

Bottom

Coralline Mud.

Bottom temperature

No. of thermometer

L. None Cor.

Corrected temperature

Air

79.5

Surface

75

Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Center of Buoy 50 - N 74° 45' E., 1 1/2'

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *177* Date *2 June 1880**Tanner* Machine. — Reel. —Turns *19* Cor. +Depth *26 fms.*Shot or lead *26 lbs.*Bottom *coralline*

Bottom temperature

No. of thermometer *6* Name Cor.

Corrected temperature

Air *79.* — Surface *75.* — Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>1.30.20</i>		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Center of Buoy - No. 2, 11/11/11

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 4405. Date 2 June '02

Tanner Machine. — Reel. —

Turns 60 Cor. + 2 Depth 62

Shot or lead 26 lb.

Bottom crs co S. Foran.

Bottom temperature

No. of thermometer 6200 Cor.

Corrected temperature

Air 79. — Surface 75. — Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		60		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Center of Buoy ~~8~~ - N 86° 30' E, 11 3/4'

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *111* Date *Feb 11 1881*
Sigsbee Machine. [#] / Reel. *Var.*
 Turns *333* Cor. + *33* Depth *366* fms.
~~Shot or lead~~ *36* Lbs.
 Bottom *fine co. S.*
 Bottom temperature }
 No. of thermometer } *None* Cor.
 Corrected temperature }
 Air *78.* - Surface *75.* - Drift
 Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>2. 13.00</i>	<i>2. 21.15</i>	0		
<i>14. 10</i>	<i>20.00</i>	100		
<i>15. 10</i>	<i>19.00</i>	200		
<i>16. 25</i>	<i>18.00</i>	300		
<i>2. 16.50</i>	<i>2. 17.30</i>	<i>333</i>		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Center of Buoy 22 - S 85° E, 11 1/10'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	2.77
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

$$5.2 = \sqrt{2.0}$$

No. *3977*. Date *June 22*.
Sigsbee Machine. / Reel *1*.
 Turns *796* Cor. + *80* Depth *876 fms.*
 Shot or lead *35* Lbs.
 Bottom *fn Co S, for. R.*
 Bottom temperature *38. -*
 No. of thermometer *804601* Cor. *{ 35.8*
 Corrected temperature
 Air *78. -* Surface *75. -* Drift *1'*
 Trawl or dredge *5 1/2' Blake with beam*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>3.42.00</i>	<i>3.01.30</i>	0	<i>3.07.30</i>	<i>15.30</i>
<i>43.00</i>	<i>3.00.25</i>	100	<i>11.40</i>	<i>11.50</i>
<i>44.00</i>	<i>59.20</i>	200	<i>15.25</i>	<i>08.10</i>
<i>45.00</i>	<i>58.15</i>	300	<i>18.55</i>	<i>04.20</i>
<i>46.05</i>	<i>57.05</i>	400	<i>22.25</i>	<i>00.00</i>
<i>47.15</i>	<i>55.55</i>	500	<i>25.20</i>	<i>57.10</i>
<i>48.25</i>	<i>54.50</i>	600	<i>28.55</i>	<i>53.35</i>
<i>49.00</i>	<i>53.50</i>	700	<i>31.55</i>	<i>49.30</i>
<i>50.51.10</i>	<i>52.40</i>	800	<i>34.55</i>	<i>44.50</i>
		900	<i>38.10</i>	<i>40.50</i>
		1000	<i>41.45</i>	<i>35. =</i>
		1100	<i>45.40</i>	<i>31.50</i>
		1200	<i>49.30</i>	<i>27.10</i>
		+ 1300	<i>53.20</i>	<i>23.05</i>
		1350	<i>57.25</i>	<i>18.35</i>
		1400	4.14 =	4.15.00
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Center of Buoy: S 75° E, 11 ²/₁₀'

61
100
300

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

4830 257
796
80
-11-

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Blake Trawl:			
50	Very large rock; 1 holosaurus sp.?			
100	1 macrroid; 3 kinds anemones;			
200	1 kind gorgonian, 1 antipatharian,			
300	2 kinds sponges, 1 annelid; 1 cephyrean,			
400	2 kinds prawns; 1 crab; 2 or 3			
500	Ample corals; 2 kinds hydroids;			
600	2 kinds siphonans.			
700				
800				
900				
1000				

Under 3000 fms.
to 1375 fms.

REMARKS:

P.L.L.

007.

No. 3978

Date

June 3rd 1902

Machine.

Reel.

Turns 31 Cor. + 1

Depth 32

Shot or lead

Bottom

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air

76

Surface

74

Drift

1/2

Trawl or dredge

SOUNDING WIRE.

DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

8.25.10

8.26.

31

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

1.03.00

1.03.30

1.04.00

1.04.30

1.05.00

1.05.30

1.06.00

1.06.30

1.07.00

1.07.30

1.08.00

1.08.30

1.09.00

1.09.30

1.10.00

1.10.30

1.11.00

1.11.30

1.12.00

1.12.30

Center of Bird I^d - N 14° E, 2 ²/₁₀'

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tangles =			
50	2 or 3 kinds corals; much of 2 kinds			
100	bryozoa; 2 kinds corallinis; many			
200	kinds algæ; many small sponges of			
300	several kinds; 2 kinds urchins;			
400	4 kinds ophiurans; 1 starfish;			
500	1 lamelli branch; several kinds crabs;			
600	several murex; 1 hydroid.			
700				
800				
900				
1000				

REMARKS:

one depth.

507
Station

U. S. 6. 4

No. 1115

Date 3 June 1901

Machine. Reel.

Turns 44 Cor. + 2 Depth

Shot or lead 26

Bottom (s) sh. for

Bottom temperature

No. of thermometer Cor.

Corrected temperature

Air 78 Surface 11 Drift

Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

1:55.11 - 1:56.30
85 fms 55.50

0
44

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Center of Bird Is N 12° E, 2 1/10

0.16
11.10

4 1/2 12

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

001.

No. 11419 Date 5/1/1900

Sigsbee Machine. 1. Reel. 1000

Turns / 1000 Cor. + 97 Depth 1097

Shot or lead

Bottom fine, lo. s. 36' 3"

Bottom temperature

No. of thermometer 80460 Cor.

Corrected temperature

Air 71 Surface 70 Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
11.21	12.30	0		
11.25	12.30	100		
11.30	12.31	200		
11.35	12.30	300		
11.40	12.31	400		
11.45	12.31	500		
11.50	12.31	600		
11.55	12.31	700		
12.00	12.31	800		
12.05	12.31	900		
12.10	12.31	1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Center of Grand - N 5° E, 5 7/10'

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 4409 Date 3rd June 02

Machine. 1 Reel. 1

Turns 880 Cor. + 87 Depth 967

Shot or lead 35

Bottom fine wh. S. M.

Bottom temperature 37.3

No. of thermometer 804 Cor.

Corrected temperature

Air Surface Drift

Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

10.25.10	10.46.40	0
28.10	10.45	100
29.10	10.44	200
30.10	10.43	300
31.10	10.42	400
32.10	10.41	500
33.10	10.40	600
34.10	10.39	700
35.10	10.38	800
36.10	10.37	900
		1000
		1100
		1200
		1300
		1400
		1500
		1600
		1700
		1800
		1900
		2000
		2100
		2200
		2300
		2400

Center of Buoy - N 40° 30' E, 7³/₁₀

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
850	3700	17.0
3750	3800	8
	3900	880
	4000	967

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THERM.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 4410 Date 28 June 07

Machine. Reel.

Turns 733 Cor. + 73 Depth 806

Shot or lead

Bottom fine wh. S. for.

Bottom temperature

No. of thermometer 80460 Cor.

Corrected temperature

Air 75 Surface 74 Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
11.50	11.50	0		
1.50	30.00	100		
2.50	29.10	200		
3.50	28.10	300		
4.50	27.00	400		
5.20	26.00	500		
6.20	25.15	600		
7.00	24.00	700		
27.00	11.50	733		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Center of Buoy - N 52° 30' E, 9 1/2

C. 105

4830 2500

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No.

Date

Machine.

Reel.

Turns

Cor. +

Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer

Corrected temperature

Air

Surface

Drift

Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

12.06.45	12.20.50	0		
07.40	19.45	100		
08.50	18.45	200		
09.20	17.35	300		
10.15	16.30	400		
11.15	15.20	500		
12.15	14.20	600		
12.12.30	12.14.00	624		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Center of line of - N 58° 36' E, 10

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

507
Hill

P.L. = 79.4

No. *Dr. 2979* Date *3 June 1902*
Cyclops Machine, *W* Reel. Name.
 Turns *200* Cor. + *20* Depth *220 fms.*
 Shot on lead *35 lbs.*
 Bottom *fine ph. s. m. R.*
 Bottom temperature *54.5*
 No. of thermometer *80460* Cor.
 Corrected temperature
 Air *55* Surface *55* Drift *8/15*
 Trawl or dredge *5 1/2 ft. Plate*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>12.51.00</i>	<i>12.56.05</i>	0	<i>1.18.25</i>	<i>3.02.10</i>
<i>51.5</i>	<i>55.00</i>	100	<i>22.30</i>	<i>58.45</i>
<i>12.52.10</i>	<i>12.53.55</i>	200	<i>24.30</i>	<i>55.50</i>
		300	<i>26.30</i>	<i>53.00</i>
		400	<i>28.30</i>	<i>50.00</i>
		500	<i>30.30</i>	<i>47.00</i>
		600	<i>32.30</i>	<i>44.00</i>
		* 700	<i>34.30</i>	<i>41.00</i>
		800	<i>36.30</i>	<i>38.00</i>
		900	<i>38.30</i>	<i>35.00</i>
		1000	<i>40.30</i>	<i>32.00</i>
		1100	<i>42.30</i>	<i>29.00</i>
		1200	<i>Time used in hauling in rope from 1200 fms. to bottom of dredging.</i>	
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
<i>* Reel out 25 fms under heavy strain while hauling in.</i>		2000		
		2100		
		2200		
		2300		
		2400		

Center of Buoy - N 64° 30' E., 11'

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Blake trawl:			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

506
506

No. *490* Date *3 June 62.*

Catsea Machine *1* Reel *1*

Turns *352* Cor. + *35* Depth *387 fms.*

Shot or lead *35 lbs.*

Bottom *fine S. Fr.*

Bottom temperature *42. -*

No. of thermometer *80460.* Cor.

Corrected temperature

Air *76. -* Surface *75. -* Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>3.05.25</i>	<i>2.15.00</i>	0		
<i>06.25</i>	<i>15.00</i>	100		
<i>07.40</i>	<i>14.15</i>	200		
<i>08.55</i>	<i>10.15</i>	300		
<i>3.08.50</i>	<i>2.09.40</i>	400		
		500		
		600		
<i>Also marked at Dr. 3979.</i>		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Center of Area 80 - N 50° 45' E, 11 ⁴/₁₀'

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *4123* Date *Aug 12 1881*Machine. *Sigsbee* Reel. *1000*Turns *25* Cor. + *2* Depth *27*Shot or lead *35*Bottom *S. M.*

Bottom temperature

No. of thermometer *507*

Cor.

Corrected temperature

Air *76*Surface *75*

Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>3.41.25</i>		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Center of Buoy - N 64° E., 12 7/10'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *4*Date *3 June 1881*Machine. *Tanner*

Reel.

Turns

Cor. +

Depth

Shot or lead

Lbs.

Bottom

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air

78

Surface

75

Drift

Trawl or dredge

SOUNDING WIRE.

DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

10

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

496	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	48.00	257		
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

P. L. 3.4
W 14 S.No. 4414 Date June 2nd 1902

Machine #1 Reel. 4

Turns 317 Cor. + 32 Depth 349

Shot or lead 35 lbs. 1

Bottom fine. lo. s. 435

Bottom temperature

No. of thermometer 80460 Cor.

Corrected temperature

Air 78 Surface 75 Drift

Trawl or dredge

SOUNDING WIRE.

DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

30.00	35.15	0
31.40	27.05	100
32.20	26.00	200
33.35	24.50	300
34.40	24.40	317

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Center of line - N 58° E., 14 ²/₁₀

		2500	
		2600	
		2700	
		2800	
		2900	
		3000	
		3100	
		3200	
		3300	
4530	257	3400	
		3500	
		3600	
		3700	
		3800	
		3900	
		4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

607.
 No. *Hy 1415* Date *June 3rd 1912*
Sigsbee Machine. # *P* Reel. *Star*
 Turns *28* Cor. + *3* Depth *31 fms*
~~Shot or lead~~ *36 lb.*
 Bottom *fm. lo. S*
 Bottom temperature
 No. of thermometer *7000* Cor.
 Corrected temperature
 Air *78* Surface *75* Drift
 Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>077</i> <i>4.54.30</i>	(0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Center of Buoy D - 761° 18' E., 16'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

S X W

No. 4416

Date

Machine.

Reel.

Turns 28

Cor. +

Depth

~~Shot or lead~~

Bottom

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air

Surface

Drift

Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

5-10.10
10.20

11.20

0
28
100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Center of Buoy - N 55° 30' E, 17 1/2'

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *1111* Date *July 10 67*
Sigsbee Machine. Reel *1*
 Turns *36* Cor. + *1* Depth *37*
 Shot or lead *36*
 Bottom *fine Co.*
 Bottom temperature *72.2*
 No. of thermometer *80460* Cor.
 Corrected temperature
 Air *78* Surface *75* Drift
 Trawl or dredge

SOUNDING WIRE.

DOWN. UP.

TURNS.

DREDGE ROPE.

DOWN. UP.

0
 100
 200
 300
 400
 500
 600
 700
 800
 900
 1000
 1100
 1200
 1300
 1400
 1500
 1600
 1700
 1800
 1900
 2000
 2100
 2200
 2300
 2400

Center of Buia Id. N 50° 45' E., 18²/₁₀'

OK
H. V. P.
in

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

C. L. 70.4
S. W.

No. 1415 Date June 3-12.

Machine #1 Reel. Heavy

Turns 427 Cor. + 43 Depth 470 fms

Shot or lead 35 lbs.

Bottom fine Co. S. For.

Bottom temperature 41

No. of thermometer 80460 Cor.

Corrected temperature

Air 78 Surface 75 Drift

Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

6-04.15	14.10	0	
05.30	13.55	100	
06.10	12.55	200	
07.05	11 =	300	
08.10	10 =	400	
08.40	09.40	427	
		500	
		600	
		700	
		800	
		900	
		1000	
		1100	
		1200	
		1300	
		1400	
		1500	
		1600	
		1700	
		1800	
		1900	
		2000	
		2100	
		2200	
		2300	
		2400	

Center of Bird Id. - N 46° E., 19 ^S/₁₀°.

0 16
2-100
4

4 11
47

4830

257

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 14419

Date 24 Oct 1912

0.6583/48

Machine. 1 Reel.

Turns 213 Cor. + 71

Depth 284

Shot or lead 60 #

Bottom cor. S. For

Bottom temperature 35.2

No. of thermometer 80460 Cor.

Corrected temperature

Air 76 Surface 75 Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
11.40.00	12.11.20	0		
46.40	34.20	100		
7.50	33.10	200		
78.10	32.10	300		
11.00	31.00	400		
	30.00	500		
	28.50	600		
	27.50	700		
	26.50	800		
	25.50	900		
	24.50	1000		
	23.50	1100		
57.00	22.50	1200		
58.00	21.50	1300		
59.00	20.10	1400		
12.00.00	19.00	1500		
01.00	17.50	1600		
03.20	16.40	1700		
04.30	15.35	1800		
05.40	14.20	1900		
06.50	13.10	2000		
08.10	11.50	2100		
8.50	12.11.00	2152		
		2200		
		2300		
		2400		

Moau Manu, or Bird Is. toward Niue Is.
 25° 42' 30" N. 161° 42' 30" W.

2500
 2600
 2700
 2800
 2900
 3000
 3100
 3200
 3300
 3400
 3500
 3600
 3700
 3800
 3900
 4000

2334 / 1215
 SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

507
E.S.E. 3/4 E. (S.C.)

No. 11 Date 4 June 02.

Machine. Reel.

Turns 2173 Cor. + 114 Depth 2287

Shot or lead 60 Lb.

Bottom M. gy. ag. c.

Bottom temperature 35.4

No. of thermometer 80460. Cor.

Corrected temperature

Air 74. - Surface 75. - Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
4.06.40	4.59.25	0		
07.30	58.25	100		
08.15	57.15	200		
09.05	56.10	300		
10.00	54.55	400		
10.55	53.45	500		
11.45	52.30	600		
12.45	51.15	700		
13.40	50.10	800		
14.40	49.10	900		
15.40	47.50	1000		
16.40	46.40	1100		
17.45	45.15	1200		
18.50	43.55	1300		
19.55	42.30	1400		
21.00	41.05	1500		
22.05	39.40	1600		
23.20	38.20	1700		
24.30	37.00	1800		
25.45	35.40	1900		
26.55	34.20	2000		
28.05	33.00	2100		
4. 28.50	31.10	2200		
		2300		
		2400		

22° 22' N. 161° 18' 30" W.

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *4421* Date *Aug 17 1902*

Machine. Reel.

Turns *186* Cor. + *186* Depth *243 1/2*Shot or lead *30*Bottom *fine M. S.*Bottom temperature *35.50*No. of thermometer *50460* Cor.

Corrected temperature

Air *75* Surface *76* Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>01.11</i>	<i>01.41</i>	0		
<i>01.20</i>	<i>04.55</i>	100		
<i>23.20</i>	<i>08.30</i>	200		
<i>24.10</i>	<i>07.30</i>	300		
<i>25 =</i>	<i>06.30</i>	400		
<i>25.55</i>	<i>05.30</i>	500		
<i>26.50</i>	<i>04.25</i>	600		
<i>27.50</i>	<i>03.25</i>	700		
<i>28.45</i>	<i>02.20</i>	800		
<i>29.40</i>	<i>01.20</i>	900		
<i>30.40</i>	<i>9.00.20</i>	1000		
<i>31.45</i>	<i>59.15</i>	1100		
<i>32.50</i>	<i>58.10</i>	1200		
<i>33.55</i>	<i>57 =</i>	1300		
<i>35.00</i>	<i>56.50</i>	1400		
<i>36.10</i>	<i>54.45</i>	1500		
<i>37.15</i>	<i>53.35</i>	1600		
<i>38.25</i>	<i>52.25</i>	1700		
<i>39.35</i>	<i>51.10</i>	1800		
<i>40.50</i>	<i>50.10</i>	1900		
<i>42.10</i>	<i>49.05</i>	2000		
<i>43.25</i>	<i>48 =</i>	2100		
<i>44.35</i>	<i>46.50</i>	2200		
<i>45 =</i>	<i>46.15</i>	2300		
		2400		

22° 21' 30" N. 160° 54' 30" W.

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50		48.0		25.7
100		22.43		11.0
200		25.57		13.17
300				22.45
400				21.50
500				
600				
700				
800				
900				
1000				

REMARKS:

No.

Date

Machine.

Reel.

Turns 1686 Cor. +

1571

Depth

18371

Shot or lead

60

Bottom

Bottom temperature

No. of thermometer

81420

Cor.

Corrected temperature

Air

77

Surface

76

Drift

Trawl or dredge

SOUNDING WIRE.

TURNS.

DREDGE ROPE.

DOWN.

UP.

DOWN.

UP.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

22° 11' N. 160° 30' 30" W.

fil
1000

4700
1686
312

1000
1513
1837

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 3980 Date June 9th, '02.

Machine.

Reel.

Turns

Cor. +

Depth

Fms.

Shot or lead

Bottom

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air

9.

Surface

Drift

Trawl or dredge 2 Surface nets, one ea. side.

SOUNDING WIRE.

DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

7.01

7.11

10^m 02^d haul =

100

Same as before

7.14

7.24

10^m 200

but in even larger quantity; made up

300

7.27

7.39

10^m 400

very largely of pink Copepods, Chironomids,

500

7.42.30

7.52.30

10^m 600

1 stomatopod, several small fishes of diff. kinds; no mycetophum.

700

7.56

8.06

10^m 800

900

8.07

8.20

11^m 10003^d haul:

1100

8.25

8.35

10^m 1200less than 1/5 former amount, but no other decided change
1 fine heteropod.

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

4th haul:Almost nothing as to quantity, Copepods having almost disappeared.
1 hippocampus; lgr heteropods; ghost fishes; few mycetophum; stenophores very numerous.

7 hauls = 71 min.

First haul:

Large quantity of Copepods; several lgr + small medusae & stenophores; 1 yf. pole; 2 small fishes; Stomatopoda; halobates; Sagittae; Aplysias; a few crab larvae and other crustacea; much sphaerogonim; no blue copepods.

Monterey, Cal. 1907. 187° 17' N. 34° 33' W.

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Clear and deep. Light 18.00.			
50	br. g. S. until 100.			
100				
200	5 th haul = Quantity small, as before.			
300	few copepods; few crabs, and other crustacea;			
400	few ctenophores and medusae;			
500	Many myctophum; 2 or 3 other small			
600	miniature fishes of one species; the			
700	variety greatly diminished. Halobates			
800	is always.			
900				
1000	6 th haul: As above. Many myctophum			
	few other fishes; many ctenophores;			
	halobates; few			
	REMARKS: Copepods, crabs, &			
	other crustacea.			

7th haul. As before. The mass of material made up as in hauls 4-6) of sphaerocyon mixed with few copepods. Several myctophum; no other fishes. Many ctenophores; 3 annelids.

11/14.8

No.

Date

Machine.

Reel.

Turns 598 Cor. + 58

Depth 636 fms

Shot or lead

Bottom

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air

Surface

Drift

Trawl or dredge

SOUNDING WIRE:

DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

7.51.30 8.04.40
 7.52.40 8.03.45
 7.53.40 8.02.45
 7.54.30 8.01.50
 7.55.30 8.01.00
 7.56.30 8.00.00
 7.57.30 7.59.00

0
 100
 200
 300
 400
 500
 578
 700
 800
 900
 1000
 1100
 1200
 1300
 1400
 1500
 1600
 1700
 1800
 1900
 2000
 2100
 2200
 2300
 2400

8.05.00
 8.06.00
 8.07.00
 8.08.00
 8.09.00
 8.10.00
 8.11.00
 8.12.00
 8.13.00
 8.14.00
 8.15.00
 8.16.00
 8.17.00
 8.18.00
 8.19.00
 8.20.00
 8.21.00
 8.22.00
 8.23.00
 8.24.00
 8.25.00
 8.26.00
 8.27.00
 8.28.00
 8.29.00
 8.30.00
 8.31.00
 8.32.00
 8.33.00
 8.34.00
 8.35.00
 8.36.00
 8.37.00
 8.38.00
 8.39.00
 8.40.00
 8.41.00
 8.42.00
 8.43.00
 8.44.00
 8.45.00
 8.46.00
 8.47.00
 8.48.00
 8.49.00
 8.50.00
 8.51.00
 8.52.00
 8.53.00
 8.54.00
 8.55.00
 8.56.00
 8.57.00
 8.58.00
 8.59.00
 9.00.00

Surface net =
 over In

8.20 8.40
 8.44 8.59

1 haul - 25 min

* Towed out the
 910 and heavy
 ...

Vicinity of Kauai Is.
 Nawiliwili Light N 82° W, 42 1/2'

2500
 2600
 2700
 2800
 2900
 3000
 3100
 3200
 3300
 3400
 3500
 3600
 3700
 3800
 3900
 4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Fair and pleasant weather.			
50	Light NW breeze; calm sea.			
100				
200				First haul.
300	little material. Few small			
400	shore fishes of kinds that seem			
500	not to be at surface at night.			
600	Few large blue copepods and other			
700	crustacea, Calobates; sphaerogomus;			
800	two larval mollusks (? nudibranchs)			
900	2d haul not listed -			
1000				

REMARKS:

Tangles = Good haul with much branching gorgonians + ophiurans wound about them. 4 kinds ophiurans; 1 kind starfish; munida; hermit; isopod; sponge; urchin; gonostoma; 2 kinds gorgonians.

No. *H 4427* Date *10 June '02.*

Sigsbee Machine *#1*. Reel. *Navy.*

Turns *372* Cor. + *31* Depth *403*

Shot or lead *36* Lbs.

Bottom *fine or co. gy. s.*

Bottom temperature *54.0 at 403 fms. 54.1 at 400 fms.*

No. of thermometer *80486.* Cor.

Corrected temperature

Air *86.* Surface *77.* Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>9.10.00</i>		0		
<i>9.10.15</i>		100		
<i>9.10.30</i>		200		
<i>9.10.45</i>		300		
<i>9.11.00</i>		400		
<i>9.11.15</i>		500		
<i>9.11.30</i>		600		
<i>9.11.45</i>		700		
<i>9.12.00</i>		800		
<i>9.12.15</i>		900		
<i>9.12.30</i>		1000		
<i>9.12.45</i>		1100		
<i>9.13.00</i>		1200		
<i>9.13.15</i>		1300		
<i>9.13.30</i>		1400		
<i>9.13.45</i>		1500		
<i>9.14.00</i>		1600		
<i>9.14.15</i>		1700		
<i>9.14.30</i>		1800		
<i>9.14.45</i>		1900		
<i>9.15.00</i>		2000		
<i>9.15.15</i>		2100		
<i>9.15.30</i>		2200		
<i>9.15.45</i>		2300		
<i>9.16.00</i>		2400		

Haukeville Light, N 80° 30' W, 3'

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *Dr. 2012* Date *10 June 22*
215 fms Machine. Reel. *Taney*
 Turns *212* Cor. + *21* Depth *232 fms.*
 Shot or lead *36*
 Bottom *crs*
 Bottom temperature
 No. of thermometer *2* Cor.
 Corrected temperature
 Air *84.* Surface Drift *{ N 87° W,
9/10*
 Trawl or dredge *2* in time

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

0

*10.13.00**10.45.00*

100

200

31.00

300

10.12.00

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Nauilimali Light, N 68° W. 1 ⁶/₁₀'.

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tangles:			
50	2 solitary corals; much			
100	hydrocoralline; 1 starfish; 3 kinds			
200	hydroids; 2 kinds gorgonians; 2			
300	kinds antipatharians; sev'l kinds			
400	sponges; 2 kinds muricea; 1 squilla;			
500	sev'l alpheus; hermits; sev'l kinds			
600	crab; shrimp; 1 ophiuran; sev'l			
700	clypeastrids; much of sev'l sp.			
800	coralline; 1 hippocampus; sev'l			
900	small serranoids.			
1000				

REMARKS:

No. *4424* Date*Sigsbee* Machine. *21* Reel.Turns *12* Cor. + *4* Depth *16*

Shot or lead

Bottom *crs br co S. L.*Bottom temperature *75.2*No. of thermometer *92449* Cor.

Corrected temperature

Air *54* Surface *78* - Drift

Trawl or dredge

SOUNDING WIRE.

DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Hawalewile Light, N 46° W, 8 10'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *3755* Date *10 June '02.*Machine. / Reel. / *Heavy*Turns *506* Cor. + *0* Depth *506 fms.*

Shot or lead

Bottom *S. G. R.*Bottom temperature *39.1*No. of thermometer *1159.74* Cor.

Corrected temperature

Air *82* Surface *77* Drift *1/16*Trawl or dredge *S. G. R.*

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

<i>11.34.45</i>	<i>11.44.30</i>	0	<i>11.53.45</i>	<i>11.58.00</i>
		100	<i>55.50</i>	<i>4.00</i>
		200	<i>57.00</i>	<i>4.10</i>
		300	<i>12.00.30</i>	<i>37.00</i>
		400	<i>04.10</i>	<i>38.00</i>
		500	<i>07.10</i>	<i>39.00</i>
		600	<i>10.10</i>	<i>40.00</i>
		700	<i>11.20</i>	
		800		<i>11.40</i>
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Nawiliwili Light 876° W., 3710'

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Janner Trawl = Porogonians; ophiurans attached to coral; 2 shrimp.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Down 2000 to 635 fms

Net Capsized - tide still
partially

No. *4425* Date *June 10th 1902.*Machine. *#1* Reel. *Kay*Turns *344* Cor. + *34* Depth *378 fms*Shot or lead *36*Bottom *fr. br. S & S*Bottom temperature *41°*No. of thermometer *92449* Cor.

Corrected temperature

Air *94* Surface *78* Drift

Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

*52.10**57.45*

0

*53 =**56.25*

100

*53.55**57.25*

200

*54.55**56.10*

300

*55.20**55.10**344*
400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Mauvieux Light, 665° N., 3²/₁₀'

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

O.L. 51.8

No. *D 3984* Date *June 10th 1905*
Sigsbee Machine #1 Reel. *1*
 Turns *215* Cor. + *22* Depth *237*
 Shot or lead *36 lbs.*
 Bottom *fine leo S.*
 Bottom temperature *42°*
 No. of thermometer *73447* Cor.
 Corrected temperature
 Air *84* Surface *78* Drift *N 26° W*
 Trawl or dredge *Sample Dredge, 9 fms - Smith*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>25.30</i>	<i>34.25</i>	0	<i>1-39.50</i>	<i>34.40</i>
<i>27.05</i>	<i>33.25</i>	100	<i>42.55</i>	<i>31.00</i>
<i>28.55</i>	<i>32.15</i>	200	<i>47.00</i>	<i>27.00</i>
<i>31.13</i>	<i>32.05</i>	<i>215</i>	<i>51.40</i>	<i>23.00</i>
		300	<i>54.45</i>	<i>18.20</i>
		400	<i>58.20</i>	<i>14.00</i>
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Navilewili Light, 830° 30' N, 3⁵/₁₀'

910
900

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tangles = 2 large maioid crabs; 1 hippa; 2 munda; 2 kinds crabs; 1 prawn; 3 ophiurans; 2 holothurians; dentalium; bryozoan; 1 hermit; 3 annelids; hydroid; 1 eel.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *49* *4420* Date *June 10* *26*Machine. *1* Reel. *744*Turns *149* Cor. + *15* Depth *164* *fms*Shot or lead *30 lbs*Bottom *gy M.*Bottom temperature *55.0*No. of thermometer *72249* Cor.

Corrected temperature

Air *73* Surface *77* Drift

Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

*2-35 =**42.10**0**37.10**46.10**100**39.40**40.25**149*
*200**300**400**500**600**700**800**900**1000**1100**1200**1300**1400**1500**1600**1700**1800**1900**2000**2100**2200**2300**2400*

Nawakimbi Light, S 18° 21, 4' 10'.

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

O L 52.8

No. *Hy 4427* Date *June 10-02*
Tanner Machine. Reel.
 Turns *13* Cor. + *1* Depth *14 fms*
 Shot or lead *26 lb*
 Bottom *co. s.*
 Bottom temperature *60.0*
 No. of thermometer *921119* Cor.
 Corrected temperature
 Air *83* Surface *79* Drift
 Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>2:57</i>		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Nauilivili Light, S 4° 30' 74.5.

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

C. I. 57.8

No. 5985 51
Machine #1

Date June 10-02

Reel Navy

Turns 434 Cor. + 43

Depth 477 fms

Shot or lead 35 lbs

Bottom gy. S. For. shore deposit?

Bottom temperature 40.0

No. of thermometer 2222 Cor.

Corrected temperature { N 27.0 W.

Air 85 Surface 77 Drift 1.

Trawl or dredge 7' X 8' M. dredge

SOUNDING WIRE

DREDGE ROPE

DOWN.	UP.	TURNS.	DOWN.	UP.
3-53.50	4-02.30	0	4-10.00	73
54.45	01.30	100	15.00	74
55.50	4-00.40	200	16.00	75
	57.00	300	17.00	21.2
	58.45	400	48.50	
57.50	58.25	500		
		600		
		700		
		800		
		900	20.00	
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Hanamaulu (Thukini) Warehouse
S 53° 30' W, 1 b.

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
4830	3500	257
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
35				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

Tanner Trawl =
1 (?) *Calientichthys*; 2 kinds
macrurus; 1 *Callosaurus*; *munida*;
2 kinds prawns; 1 *Isopod*;
phormopoma and 3 other *isopods*;
1 *antidote*; 2 *umbellula*.

REMARKS:

Mass float broken.

No. 4428 Date 10 June 1902

Machine. 1 Reel.

Turns 391 Cor. + 39 Depth

Shot or lead 35 lbs

Bottom gy S. For. ? fine deposit?

Bottom temperature 45

No. of thermometer 92449 Cor.

Corrected temperature

Air 85 Surface 78 Drift

Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

26.40	5.31.15	0		
27.55	32.40	100		
28.10	32.46	200		
29.45	32.30	300		
30.25	32.20	391		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Hanamaulu March 10, 1894, 3:11, 6 10

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *Dr. 3986* Date *11 June, 05.**Sigsbee* Machine. *X* / Reel.Turns *329* Cor. + *37* Depth *362 fms.*Shot or lead *35* Lbs.Bottom *gy S. for.* *Phos. dep. 247*Bottom temperature *41.8*No. of thermometer *92449* Cor. *0.175*

Corrected temperature

Air *78.* Surface *76.* Drift *11*Trawl or dredge *8 ft. Tanner*

SOUNDING WIRE.

DREDGE ROPE.

DOWN.	UP.	TURNS.	DOWN.	UP.
<i>8. 28.55</i>	<i>8. 35.20</i>	0		
<i>29.00</i>	<i>35.30</i>	100	<i>29.55</i>	<i>35.40</i>
<i>30.00</i>	<i>35.20</i>	200	<i>31.00</i>	<i>35.30</i>
<i>31.00</i>	<i>34.25</i>	300	<i>32.00</i>	<i>35.20</i>
<i>8. 32.00</i>	<i>8. 34.20</i>	<i>329</i>	<i>33.00.00</i>	
		400	34.00	
		500	35.00	
		600	36.00	
		700		
		800		
		900	<i>15</i>	
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
<i>* Reeled out to 607</i>		1600		
<i>made in hauling strainer</i>		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Handmade Net house, 837°30'N, 6⁵/₁₀'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
327	3800	
32	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tanner Trawl:			
50				
100				
200				
300				
400	2 Knids munda; 3 Knids prawns; 1 pentachelus; 1 maiaid; little sponge; 1 sphaerocera; 2 knid. gorgonians; 1 maccurus; 1 peris- demon.			
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 308 Date 11 Nov. '02.

Machine. Reel.

Turns 50 Cor. + Depth 55 fms.

Shot or lead 36

Bottom crs co S. Frag.

Bottom temperature 73.

No. of thermometer 92449. Cor.

Corrected temperature

Air 78. Surface 77. Drift 1.1

Trawl or dredge 9 Single Beam

SOUNDING WIRE.

DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

9.52.00		0	10.03.20	10.10.00
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Annals of the Marine Biological Association of the United Kingdom, 824. H., 68, 10',

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Faintly visible			
50				
100				
200				
300				
400	other hard bodies; much dead foliaceous coral encrusted with bryozoa, sponges, and coralline; 4 kinds crabs; 1 kind prawn, 2 kinds hydroids, 1 single coral.			
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *Hy. 4429*. Date *11 June, '02*.*Tanner* Machine. Reel. *—*Turns *48* Cor. + *2* Depth *50 fms.*Shot or lead *26 lbs.*Bottom *co S. Sh*

Bottom temperature

No. of thermometer } *None* Cor. . . .

Corrected temperature

Air *79* Surface *77* Drift

Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

*1021.30**0**104*
100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

*No. marks and**ok**Dr. 3987.*

Sanamaula Warehouse, S 23° N. 7⁵/₁₀'

OK
HOB.
2

496
48
448

12
10
2

2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Smithsonian

P.L. = 77.4

No. *4430* Date *11 June, '02.*
Sigsbee Machine. #1 Reel. *Navy*
 Turns *1414* Cor. + *130* Depth *1544 fms.*

Shot or lead *35 lbs*
 Bottom *Glob gy.*

Bottom temperature *34.9°*

No. of thermometer *92449.* Cor.

Corrected temperature

Air *79* Surface *77* Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>11.29.00</i>	<i>03.45</i>	0		
<i>30.10</i>	<i>02.40</i>	100		
<i>31.15</i>	<i>01.45</i>	200		
<i>32.45</i>	<i>12:00.45</i>	300		
<i>34.00</i>	<i>59.50</i>	400		
<i>35.10</i>	<i>59.00</i>	500		
<i>36.30</i>	<i>58.05</i>	600		
<i>37.50</i>	<i>57.10</i>	700		
<i>39.05</i>	<i>56.10</i>	800		
<i>40.30</i>	<i>55.10</i>	900		
<i>41.50</i>	<i>54.10</i>	1000		
<i>43.15</i>	<i>53.10</i>	1100		
<i>44.50</i>	<i>52.10</i>	1200		
<i>46.15</i>	<i>51.05</i>	1300		
<i>47.45</i>	<i>49.45</i>	1400		
<i>48.00</i>	<i>49.30</i>	1414		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Hanamaulu Wharfed, 8430 W, 14⁹/₁₀'

OK
~~200~~
3

$$\begin{array}{r} 4830 - 257 \\ 1414 \\ \hline 3416 \end{array} \quad \begin{array}{r} 129 \\ 130 \\ 1414 \\ \hline 1544 \end{array}$$

15 - 35

5 - 60

94 - 35

56 - 60